

Message Text

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C O N F I D E N T I A L BRASILIA 3119

C O R R E C T E D C O P Y - T E X T

E.O. 11652: GDS
TAGS: TECH ENRG BR
SUBJECT: GOB/FRG URANIUM ENRICHMENT COLLABORATION

REF: (A) 75 BONN 10938 (B) BONN 05370 (C) BONN 05690

1. SUMMARY. GOB VERSION OF SUBJECT COLLABORATION
DISAGREES WITH INFORMATION GIVEN BY FRG IN SEVERAL
ASPECTS RELATED TO SIGNIFICANCE OF FRG TECHNOLOGY
EXPORT LICENSING STEPS. END SUMMARY.

2. EMBASSY IS AWARE OF DIFFERENCES IN STATEMENTS MADE
BY GOB AND INFORMATION EXISTING IN WASHINGTON AND BONN,
AS GIVEN IN TAB M ("BRAZILIAN/WEST GERMAN DEAL IN IVERVIEW")
OF BRIEFING BOOK FOR USDEL LED BY DEPUTY SECRETARY
CHRISTOPHER TO BRASILIA ON MARCH 1, AND IN REFTELS CON-
CERNING GOB/FRG COLLABORATION ON URANIUM ENRICHMENT
TECHNOLOGY AND ITS TRANSFER TO GOB. THISEMESSAGE SEEKS
TO BEGIN PROCESS OF RECONCILIATION OF THESE DIFFERENCES.

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3. IN ITS PRESENTATION OF GOB/FRG NUCLEAR ACCORD TO
BRAZILIAN CONGRESS AND PUBLIC IN AUGUST 1975, GOB
STATED THAT URANIUM ENRICHMENT COLLABORATION WOULD BE
CENTERED ON JET-NOZZLE PROCESS, WHICH WAS STILL AT PRE-
TECHNOLOGY STAGE. IN PARTICULAR, FRG LABORATORY MADELS
REQUIRED EXCESSIVE ENERGY INPUTS PER UNIT ENRICHED
PRODUCT OUTPUT. THEREFORE, COLLABORATION WOULD BEGIN

WITH JOINT EFFORT TO PRODUCE TECHNICALLY AND COM-MERCIALY VIABLE ENRICHMENT TECHNOLOGY (PARTICULARLY TO REDUCE ENERGY REQUIREMENTS), PATENTABLE AND LICENSEABLE, AND CULMINATE IN "SEMI-INDUSTRIAL" PLANT IN BRAZIL. FOR THESE PURPOSES THREE JOINT (IN FINANCING AND PERSONNEL) COMPANIES WOULD BE ESTABLISHED: (A) NUSTEG, 50 PERCENT FRG (STEAG KERNENERGIE) AND 50 PERCENT NUCLEBRAS, TO DEVELOP JET NOZZLE PROCESS TO TECHNOLOGICAL STAGE; (B) NUSTEP, 50 PERCENT FRG (SK ALSO) AND 50 PERCENT NUCLEBRAS, TO COMMERCILIZE AND LICENSE APPLICATION OF JET-NOZZLE TECHNOLOGY IN THIRD COUNTRIES; (C) SEMI-INDUSTRIAL "DEMONSTRATION" PLANT, 25 PERCENT FRG (15 PERCENT SK AND 10 PERCENT INTERATOM) AND 75 PERCENT NUCLEBRAS WITH INITIAL EXPANDABLE CAPACITY OF 250,000 SWU PER YEAR. ALTHOUGH NO ANNOUNCEMENT OF ESTABLISHMENT OF THESE COMPANIES WAS EVER MADE IN BRAZIL, GOB HAS SEVERAL TIMES SINCE RE-CONFIRMED THESE PLANS. CNEN PRESIDENT HERVASIO CARVALHO, ON HIS RETURN FROM VISIT TO FRG LAST YEAR, STATED TO PRESS THAT BRAZILIAN AND GERMAN TECHNICIANS WORKING TO GETHER WERE MAKING PROGRESS IN DECREASING ENERGY REQUIREMENTS OF JET-NOZZLE PROCESS. FURNAS TECHICIANS REPORTED THAT PROF BECKER HAD EXPLANIED TO THEM HOW JET-NOZZLE PROCESS WAS INHERENTLY RELATIVELY "PROLIFERATION PROOF", COMPARED TO DIFFUSION OR ULTRACENTRIFUGE PROCESS BECAUSE ENRICHED MATERIAL COULD NOT BE SIMPLY RECYCLED THROUGH BRAZIL DEMONSTRATION PLANT STAGES WITHOUT CRITICAL MASS PROBLEMS. GOB HAS STATED REPEATEDLY THAT DEMONSTRATION ENRICHMENT PLANT WILL BE BUILT AT NUCLEBRAS INDUSTRIAL FUEL /CYCLE COMPLEX ON SEPETIBA BAY NEAR RIO--I.E., IN ENERGY

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SITE SOUTH OF BRAZIL RATHER THAN REMOTE HYDROPOWER SITE. NUCLEBRAS PRESIDENT NOQUEIRA BATISTA STAEDD APRIL 15 THAT PILOT PLANT IN BRAZIL IS NOW BEING PLANNED BASED ON PRESENT STAGE OF "GERMAN-BRAZILIAN" JET-NOZZLE TECHNOLOGY, WHICH IS ALREADY COMMERCIALY VIABLE, TO BE FOLLOWED BY LARGE SCALE PLANT.

4. WASHINGTON AND LATEST BONN DESCRIPTIONS DISAGREE WITH GOB VERSION IN SEVERAL KEY ASPECTS. SINCE PART OF GOB ARGUMENT IS THAT ENRICHMENT COLLABORATION IS NOT TYPICAL TECHNOLOGY TRANSFER TO LDC BUT IS MORE SIMILAR TO JOINT TECHNOLOGY DEVELOPEMENT AND UTILIZATION VENTURE LIKE URENCO (EVEN THOUGH GOB HAD DONE NO R&D ON PROCESS PRIOR TO ACCORD), EMBASSY WOULD APPRECIATE CLARIFICATION OF THIS ISSUE. REFTELS WOULD APPEAR TO GIVE LIE TO GOB VERSION, IF FRG REPRESENTATIVES ARE GIVING BONN FULL ACCURATE PICTURE. CRIMMINS

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